A string of length (<=100000) is given as input.

There are two queries (1 indexing):

Type 1: 0 l r c (update the range from l to r with character c )

Type 2: 1 k c (print the index of k’th character c )

If the k’th character does’nt exist ,print “-1” .

Input:

Line 1:string input (in lowercase)

Line 2: no. of queries (1<=n<=100000)

In next q lines ,the queries of type 1 and type 2 is given.

Output:

For each print query ,print integer index or “-1”.

INPUT:

10

zazzxeffah

3

1 3 z

0 2 4 a

1 3 z

OUTPUT:

4

-1